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Sequence Listing was accepted.

See attached Validation Report.

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Reviewer: Durreshwar Anjum

Timestamp: [year=2010; month=5; day=3; hr=10; min=10; sec=43; ms=829; ]

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Application No: 10590870

Version No: 1.0

Input Set:

Output Set:

Started: 2010-04-23 14:53:05.942

Finished: 2010-04-23 14:53:09.612

Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 670 ms

Total Warnings: 51

Total Errors: 2

No. of SeqIDs Defined: 51

Actual SeqID Count: 51

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
E 355	Empty lines found between the amino acid numbering and the
E 321	No. of Bases conflict, this line has no nucleotides SEQID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)

**Input Set:**

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Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20) This error has occurred more than 20 times, will not be displayed

## SEQUENCE LISTING

<110> Fox, Judith A.  
Harding, Fiona A.  
Rashid, M. Harunur  
Schellenberger, Volker

## <120> CAB Molecules

<130> GC839-US

<140> 10590870

<141> 2010-04-23

<150> PCT/US05/12270

<151> 2005-04-12

<150> US 60/562,386

<151> 2004-04-15

<150> US 60/636,002

<151> 2004-12-14

<160> 51

<170> PatentIn version 3.2

 $\langle 210 \rangle$  1

<211> 262

&lt;212&gt; PRT

<213> Artificial Sequence

 $\langle 220 \rangle$ 

<223> engineered T84.66 antibody

<400> 1

Asp Ile Val Leu Thr Gln Ser Pro Ala Ser Leu Ala Val Ser Leu Gly

1                      5                      10                      15

Gln Arg Ala Thr Met Ser Cys Arg Ala Gly Glu Ser Val Asp Ile Phe

20 25 30

Gly Val Gly Phe Leu His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro

35                      40                      45

Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Val

50                      55                      60

Arg Phe Ser Gly Thr Gly Ser Arg Thr Asp Phe Thr Leu Ile Ile Asp

65                                      70                                      75

Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln Gln Thr Asn

85 90 95

Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Gly

100 105 110

Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly

115                  120                  125

Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly Ser Glu Val Gln

130 135 140

Leu Gln Gln Ser Gly Ala Glu Leu Val Glu Pro Gly Ala Ser Val Lys

145		150		155		160									
Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Asn	Ile	Lys	Asp	Thr	Tyr	Met	His
				165					170					175	
Trp	Val	Lys	Gln	Arg	Pro	Glu	Gln	Gly	Leu	Glu	Trp	Ile	Gly	Arg	Ile
			180					185					190		
Asp	Pro	Ala	Asn	Gly	Asn	Ser	Lys	Tyr	Val	Pro	Lys	Phe	Gln	Gly	Lys
		195					200					205			
Ala	Thr	Ile	Thr	Ala	Asp	Thr	Ser	Ser	Asn	Thr	Ala	Tyr	Leu	Gln	Leu
		210				215					220				
Thr	Ser	Leu	Thr	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Pro	Phe
225					230					235				240	
Gly	Tyr	Tyr	Val	Ser	Asp	Tyr	Ala	Met	Ala	Tyr	Trp	Gly	Gln	Gly	Thr
				245					250					255	
Ser	Val	Thr	Val	Ser	Ser										
				260											

<210> 2  
 <211> 623  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> CAB 1.10 construct

<400> 2

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Gln	Arg	Ala	Thr	Met	Ser	Cys	Arg	Ala	Gly	Glu	Ser	Val	Asp	Ile	Phe
			20					25					30		
Gly	Val	Gly	Phe	Leu	His	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Gln	Pro	Pro
		35				40						45			
Lys	Leu	Leu	Ile	Tyr	Arg	Ala	Ser	Asn	Leu	Glu	Ser	Gly	Ile	Pro	Val
	50				55					60					
Arg	Phe	Ser	Gly	Thr	Gly	Ser	Arg	Thr	Asp	Phe	Thr	Leu	Ile	Ile	Asp
65					70				75					80	
Pro	Val	Glu	Ala	Asp	Asp	Val	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln	Thr	Asn
				85				90						95	
Glu	Asp	Pro	Tyr	Thr	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Glu	Ile	Lys	Gly
			100					105					110		
Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly
		115				120						125			
Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Glu	Val	Gln
		130				135					140				
Leu	Gln	Gln	Ser	Gly	Ala	Glu	Leu	Val	Glu	Pro	Gly	Ala	Ser	Val	Lys
145				150					155					160	
Leu	Ser	Cys	Thr	Ala	Ser	Gly	Phe	Asn	Ile	Lys	Asp	Thr	Tyr	Met	His
				165					170					175	
Trp	Val	Lys	Gln	Arg	Pro	Glu	Gln	Gly	Leu	Glu	Trp	Ile	Gly	Arg	Ile
			180					185					190		
Asp	Pro	Ala	Asn	Gly	Asn	Ser	Lys	Tyr	Val	Pro	Lys	Phe	Gln	Gly	Lys
		195					200					205			
Ala	Thr	Ile	Thr	Ala	Asp	Thr	Ser	Ser	Asn	Thr	Ala	Tyr	Leu	Gln	Leu
		210				215					220				
Thr	Ser	Leu	Thr	Ser	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Pro	Phe
225					230					235				240	
Gly	Tyr	Tyr	Val	Ser	Asp	Tyr	Ala	Met	Ala	Tyr	Trp	Gly	Gln	Gly	Thr
				245					250					255	



gacatcgccc	tgacccagag	cccggcaagc	ctggctgttt	ccctgggcca	gcgtgccact	60
atgtcctgca	gagcgggtga	gtctgttgac	attttcggtg	tcggttttct	gcactggtac	120
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accttcggtg	gcggtactaa	actggagatc	aaaggcgggtg	gtggttctgg	tgggtggtgt	360
agcggcggcg	gtggtagcgg	tggcgggtggc	agcgggtggtg	gtggctctgg	tggcgggtggc	420
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tacgtgccaa	aattccaggg	taaagcaacc	atcactgctg	atacctcctc	taacactgct	660
tacctgcagc	tgacttccct	gactagcgaa	gacaccgcgg	tttattactg	cgctccgttc	720
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<210> 4

<211> 1869

<212> DNA

<213> Artificial Sequence

<220>

<223> CAB 1.10 construct

<400> 4

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caacagaaac	cgggtcagcc	gccaaaactg	ctgatctatc	gtgcttctaa	cctggagtcc	180
ggcatcccgg	tacgtttctc	cgggtactggc	tctcgtactg	attttaccct	gattatcgac	240
ccggtggaag	cagacgatgt	tgccacctac	tattgccagc	agaccaacga	ggatccgtac	300
accttcggtg	gcggtactaa	actggagatc	aaaggcgggtg	gtggttctgg	tgggtggtgt	360
agcggcggcg	gtggtagcgg	tggcgggtggc	agcgggtggtg	gtggctctgg	tggcgggtggc	420
tctgaagtgc	agctgcagca	gtccgggtgcg	gagctcggtt	aaccgggcgc	ttctgtgaaa	480
ctgtcttgca	ctgcatctgg	tttcaacatt	aaggacacct	acatgcactg	ggtgaaacaa	540
cgcccggaac	aggggtctgga	gtggatcggg	cgcatcgatc	cggctaaccg	taacagcaaa	600
tacgtgccaa	aattccaggg	taaagcaacc	atcactgctg	atacctcctc	taacactgct	660
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cactattaca	catttggtcaa	ggccgatatc	gcggcgaata	aaccggttac	gcctcagacc	960
ctgttcgagc	tgggttctat	aagtaaaacc	ttcacccggc	ttttaggtgg	ggatgccatt	1020
gctcgcgggtg	aaatttcgct	ggacgatgcg	gtgaccagat	actggccaca	gctgacgggc	1080
aagcagtggc	aggggtattcg	tatgctggat	ctcgccacct	acaccgctgg	cggcctgccg	1140
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caagcctatg	gcgtgaaaac	caacgtgcag	gatatggcga	actgggtcat	ggcaaacatg	1500
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gcgctacag						1869

<210> 5  
<211> 262  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> CAB 1.11 construct

<400> 5  
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20 25 30  
Gly Val Gly Phe Leu His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro  
35 40 45  
Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Val  
50 55 60  
Arg Phe Ser Gly Thr Gly Ser Gly Thr Asp Phe Thr Leu Ile Ile Asp  
65 70 75 80  
Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln Gln Thr Asn  
85 90 95  
Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Gly  
100 105 110  
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly  
115 120 125  
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln  
130 135 140  
Leu Gln Gln Ser Gly Ala Glu Leu Val Glu Pro Gly Ala Ser Val Lys  
145 150 155 160  
Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Thr Tyr Met His  
165 170 175  
Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile Gly Arg Ile  
180 185 190  
Asp Pro Ala Asn Gly Asn Ser Lys Tyr Val Pro Lys Phe Gln Gly Lys  
195 200 205  
Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr Leu Gln Leu  
210 215 220  
Thr Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Pro Phe  
225 230 235 240  
Gly Tyr Tyr Val Ser Asp Tyr Ala Met Ala Tyr Trp Gly Gln Gly Thr  
245 250 255  
Ser Val Thr Val Ser Ser  
260

<210> 6  
<211> 786  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> CAB 1.11 construct

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caacagaaac cgggtcagcc gccaaaactg ctgatctatc gtgcttctaa cctggagtcc 180  
ggcatcccggtacgtttctc cgggtactggc tctggtactg attttaccct gattatcgac 240



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ccggtggaag cagacgatgt tgccacctac tattgccage agaccaacga ggatccgtac 300
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agcgggtggcg gtggtagcgg tggcggtggc agcgggtggt gtggtctctgg tggcggtggc 420
tctgaagtgc agctgcagca gtccggtgcg gagctcgttg aaccgggcgc ttctgtgaaa 480
ctgtcttgca ctgcatctgg tttcaacatt aaggacacct acatgcactg ggtgaaacaa 540
cgcccggaac aggggtctgga gtggatcggg cgcacgcgac cggctaacgg taacagcaaa 600
tacgtgccaa aattccaggg taaagcaacc atcactgctg atacctcctc taacactgct 660
tacctgcagc tgacttcctt gactagcgaa gacaccggcg tttattactg cgctccgttc 720
ggctactatg tcagcgatta cgcaatggcc tactgggggtc agggcacctc tgttaccgtt 780
tctagc 786

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<210> 7
<211> 623
<212> PRT
<213> Artificial Sequence

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<220>
<223> CAB 1.11 construct

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<400> 7
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          20          25          30
Gly Val Gly Phe Leu His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
          35          40          45
Lys Leu Leu Ile Tyr Arg Ala Ser Asn Leu Glu Ser Gly Ile Pro Val
          50          55          60
Arg Phe Ser Gly Thr Gly Ser Gly Thr Asp Phe Thr Leu Ile Ile Asp
65          70          75          80
Pro Val Glu Ala Asp Asp Val Ala Thr Tyr Tyr Cys Gln Gln Thr Asn
          85          90          95
Glu Asp Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Gly
          100         105         110
Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
          115         120         125
Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Glu Val Gln
          130         135         140
Leu Gln Gln Ser Gly Ala Glu Leu Val Glu Pro Gly Ala Ser Val Lys
145         150         155         160
Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Thr Tyr Met His
          165         170         175
Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile Gly Arg Ile
          180         185         190
Asp Pro Ala Asn Gly Asn Ser Lys Tyr Val Pro Lys Phe Gln Gly Lys
          195         200         205
Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Ala Tyr Leu Gln Leu
          210         215         220
Thr Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala Pro Phe
225         230         235         240
Gly Tyr Tyr Val Ser Asp Tyr Ala Met Ala Tyr Trp Gly Gln Gly Thr
          245         250         255
Ser Val Thr Val Ser Ser Thr Pro Val Ser Glu Lys Gln Leu Ala Glu
          260         265         270
Val Val Ala Asn Thr Ile Thr Pro Leu Met Lys Ala Gln Ser Val Pro
          275         280         285
Gly Met Ala Val Ala Val Ile Tyr Gln Gly Lys Pro His Tyr Tyr Thr

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	290					295						300							
Phe	Gly	Lys	Ala	Asp	Ile	Ala	Ala	Asn	Lys	Pro	Val	Thr	Pro	Gln	Thr				
305					310					315								320	
Leu	Phe	Glu	Leu	Gly	Ser	Ile	Ser	Lys	Thr	Phe	Thr	Gly	Val	L					